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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/636,286	08/10/2000	Robert Arthur Giddings	RD-27,791	7072

6147 7590 08/19/2003

GENERAL ELECTRIC COMPANY
GLOBAL RESEARCH CENTER
PATENT DOCKET RM. 4A59
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EXAMINER

HOFFMANN, JOHN M

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 08/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

8/19/03

Office Action Summary

Application No.

09/636,286

Applicant(s)

GIDDINGS ET AL.

Examiner

John Hoffmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,8,9 and 20-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,8-9, 20-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6-23-03 has been entered.

Claim Rejections - 35 USC § 103

Claims 1, 4,5, 9 20, 22-23, 27 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's prior art teaching in view of Palmquist 4430109.

Applicant admits that the drawing of molten glass to form glass articles is well known. See the Background of the Invention section of the present application. The Prior art teaching does not disclose the gas or the lining. Palmquist discloses a superior furnace that has "enhanced thermal efficiency" (col. 1, line15). It would have been obvious to create the molten glass of the prior art method by using the Palmquist furnace for the advantages that Palmquist discloses. Relevant portions of Palmquist include figure 1 and col. 4, lines 46 and 50, and col. 5, line 8. Col. 9, line 69 discloses air - which comprises a carrier gas (nitrogen) and an oxidizing gas (oxygen or reaction byproducts see col. 2, line 66).

Claim 4: it is not indicated what fuel is used (col. 9, line 67). It would have been obvious to use a hydrocarbon fuel - because such fuels are inexpensive readily available. Water vapor is a by-product of combustion of hydrocarbon fuels.

Claim 5 is clearly met (col. 10, line 36 and elsewhere).

Claims 22-23: it would have been obvious that the air would have water vapor in it.

Claims 9, 27 are clearly met.

Claims 29-30: see col. 5, lines 55-58. One would expect to have the same results as applicant has - because the two methods are substantially the same. Alternatively, it would have been obvious to have as low a contamination as possible so as to maintain the purity, and prevent the loss of furnace material.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1,3-5,8-9, 20-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 27, there is no antecedent basis for "said protective lining material".

Claims 29-30 refer to "a fused SiO₂ material" - it is unclear if this is the same material of claim 20, or if it is an additional material.

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Claim 31, there is no antecedent basis for "the silica". The claim 20, "a SiO₂ material" can be something other than silica. It is unclear if applicant intends claim 20 to be limited to silica. It is unclear if the fusing of claim 31 further limits the fusing of claim 20, or if it is an additional fusing step.

Claim 9, there is no antecedent basis for "said protective lining material".

Also, lines 4-5 of claim 1 are unclear as to what they require. AS examiner interprets the claim, one can avoid the limitation by using rhenium lining that has a platinum fastener or layer. However, it could be that applicant intended the claim to require a protective lining which comprises a protective lining material selected from the group. The claim is indefinite because a composition/metal is not a lining; rather the lining comprises or consists of the metal. The same applies to claim 20.

Claim 1, lines 6-7, there is no antecedent basis for "said furnace."

Claims 8 and 28: there is no antecedent basis for "said refractory material".

Claim 20: there is no antecedent basis for any "meting" (sic) zone, line 7.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that the PTO has to establish that the prior has the same improvement as applicant discovered (In re Lee), the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences

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would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). This is the statement of authority that applicant requested.

The comments regarding thermoplastic material are not understood. Glass is a thermoplastic material. See Palmquist col. 5, lines 18-20

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., removing and/or reducing the effect of refractory materials contamination) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

IT is further argued that the combination does not teach fusing SiO₂ material in a gas atmosphere. Page 1, lines 10-13 of Applicant's disclosure disclose the fusing of SiO₂. Palmquist, has gas lines 17 which provide the atmosphere. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is 703-308-0469. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

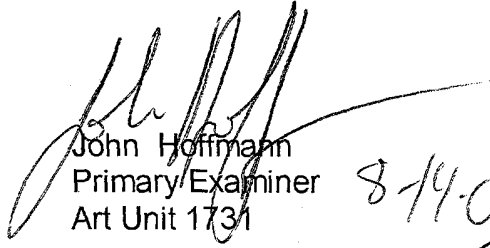
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 703-308-1164. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

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John Hoffmann
Primary Examiner
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8-14-03

jmh